

Furukawa Group Seminar

Date

December 3rd, 2021
16:00–17:00

Venue

Kyoto University, KUIAS
(iCeMS Main Building)
2F Seminar Room
(#A207)

Registration



Required from Google form

Contact

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Nano Drug Delivery Based on New Strategy

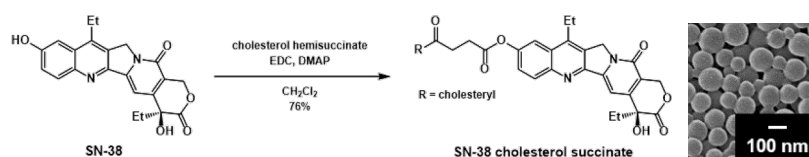


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Abstract

In this presentation, we propose a new concept, termed "pure nano-drugs" (PNDs), which are comprised of drug ingredient and are delivered into cells in a carrier-free state without using polymer. As the model of PNDs, the nanoparticles of SN-38 cholesterol succinate which is the derivatives of SN-38 having the high anticancer activity were fabricated with less than 100 nm in size by the reprecipitation method[1] developed at our laboratory[2]. Aqueous dispersion of the nanoparticles has been shown to exhibit an extremely effective anti-cancer activity not only in vitro experiment but also in vivo experiment, when compared to irinotecan, a prodrug of SN-38 and a widely used water-soluble anticancer monomer[3].



References

- [1] H. Kasai et al. Jpn. J. Appl. Phys., 31, L1132–L1134. (1992).
- [2] H. Kasai et al. Angew. Chem. Int. Ed., 51, 10315–10318 (2012).
- [3] Y. Koseki et al. Bull. Chem. Soc. Jpn., 92, 1305, (2019).

